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ABSTRACT

An examination of the incidence of eight activities believed to be associated with gang membership indicates different patterns of gang involvement for urban Black and Hispanic males. The following activities are examined: (1) perceived advantage in gang membership; (2) hanging out where gang members hang out; (3) having friends identified as gang members; (4) flashing gang signs; (5) wearing gang colors; (6) committing delinquent acts in the company of gang members; (7) being attacked in a gang-related incident; and (8) being the attacker in a gang-related incident. Information was gathered from a survey of 139 Hispanic and 300 Black males in grades 6 through 8 at 4 inner city Chicago schools, police, and school records. Analysis indicates that a majority of both groups demonstrated at least some limited gang experience or identification but different patterns of involvement were discovered between the two. Cronbach's alpha indicated a respectable level of inter-item reliability for both groups. School and police records were used to assess external validity. Fitting Rasch models to the eight items for the two subsamples produced two different, internally valid, seven-item scales. Statistical data are included on 13 tables. A list of 20 references is appended. (FMW)

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DIFFERENTIAL PATTERNS OF GANG INVOLVEMENT AMONG HISPANIC AND BLACK ADOLESCENT MALES: PROMISE FOR PREVENTION?

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ABSTRACT

Using survey data for 139 Hispanic and 300 black males in the sixth through eighth grades at four inner-city schools, we examine the incidence of eight kinds of self-reported activities that we believe to be associated with increasing gang involvement: perceived advantage in gang membership, hanging out where gang members hang out, having friends identified as gang members, flashing gang signs, wearing gang colors, committing delinquent acts in the company of gang members, being attacked in a gang-related incident, and being the attacker in a gang-related incident. A majority of both groups of students attained a score that showed at least some limited gang involvement or identification. Cronbach's alpha indicates a respectable level of inter-item reliability for both Hispanics and blacks. School and police records allow the assessment of external validity. Fitting Rasch models to the eight items for the two subsamples produces two different seven-item scales. While these scales are internally reliable, the ordering of the scale items is different for Hispanic and black youths. A preliminary examination of relationships to other variables further supports the notion of different patterns of gang involvement for Hispanics and blacks.

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Policy emphasis in anti-gang programs has generally been placed on intervention and suppression approaches as opposed to approaches involving the prevention of gang involvement. A realistic obstacle to the prevention approach is that there exists little research that describes how gang involvement comes about. Using surveys of sixth through eighth grade males at four inner-city schools, we examine a set of concrete actions that we feel measures the process of becoming a gang member.[1] Given research findings that point to differences in gang behavior between Hispanics and blacks, we focus on differential patterns of gang involvement for the two subpopulations of adolescent males. Taken in its social context and in its relationships with other variables, we believe that the indices of gang involvement that we generate here can inform the kinds of research that are necessary to constructing gang prevention strategies.

Adolescence and Gang Involvement. Above all other characteristics, Frederick Thrasher (1927) defined the gang as interstitial. Gangs are not only interstitial in the way that gangs fill the social and geographic spaces that are left unfilled by other institutions such as the school and the family. Gangs are interstitial in the sense that youth gang activity fills the poorly defined (in a social sense) time between childhood and adulthood. Male youth in sixth through eighth grades undergo significant physical and emotional changes in their transition from childhood and adolescence to young adulthood. The young male in this stage is particularly vulnerable to the

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[1] Despite changes in society at large in the roles of male and female behavior, gang involvement is still considered to be distinctly different in nature for males and females (Campbell (1983). Since the male gang involvement is seen to the "greater" social problem in terms of criminal activity, we limit our research here to males.

influence of peer relationships (Coleman 1961; Comer 1988). The strength of peer influence is often conditioned by the weakness or strength of ties to family and school. When family and school relationships are viewed as uncaring, hostile, and fragmented, peer groups or gangs may become the primary source of opportunities for achievement and self-esteem by preadolescent and early adolescent males (Thrasher 1927). The absence of social support and control from family and school can leave the youth free at a difficult stage of social development to engage in deviant behavior. The amplification of such behavior is to a great degree contingent upon reinforcement by the delinquent group or the gang (Elliott, Huizinga, and Ageton 1985). We expected to find among our group of Hispanic and black inner-city adolescent males varying degrees of delinquency and gang involvement.

Delinquency and Gang Involvement. It is important to distinguish between gangs and delinquent groups. Delinquent groups tend to be smaller, engaged in various forms of petty or sometimes serious crime. We define gang delinquency or crime as law violating behavior committed both by juveniles and adults in groups that are relatively more complexly organized, with established leadership and membership structure. The youth gang member engages in a range of illegal acts that are significantly more violent than those of the delinquent non-gang member. The gang member acts more often within a framework of mutual peer support, conflict relations with other gangs, and sometimes a tradition of turf, colors, signs, and symbols. Historically, the communal imperative has been particularly strong among gangs. It is important to observe that subgroups of the gang and different kinds of members may be differentially committed to various delinquent activities such as drug trafficking, drug use, gang fighting, burglary, or non-delinquent activities

such as hanging around and partying. The attributes of social group, delinquent group, and youth gang are not exclusive of each other but represent distinctive constellations of activity. It is important that while we can expect to find some overlap of gang involvement and delinquent behavior, we do not expect the two phenomena to be perfectly correlated.

Ethnic/Racial Differences, Delinquency, and Gang Involvement. Spergel (1963) found differently structured conflict-oriented youth gangs in two of the three communities that he studied. In particular, he noted differences between patterns of Hispanic and Italian gang involvement. In his picture of slum society as an ordered segmentation, Suttles (1968) describes parallel social worlds including those inhabited by Hispanics and blacks as being marked by economic and cultural differences. While Wilson's (1987) conceptualization of the contemporary underclass involves both Hispanics and blacks, he emphasizes significant differences between poor inner-city Hispanic and black populations with respect to level of poverty, family structure, and experience of crime. Though her primary concern is female gang involvement, Campbell (1983) draws upon differences in family organization between blacks and Hispanics to explain differences in patterns of gang involvement. Curry and Spergel (1988) delineate differential patterns of gang crime and delinquency across communities that can to some extent be attributed to the differential distribution of ethnic and racial populations. Hagedorn (1988) made most of his comparisons between Hispanic and black involvement in gangs across the distance of his own work in Milwaukee and Joan Moore's (1978, 1985)

research in Los Angeles.[2] Still, based on their combined findings, attribution of differences between Hispanic and black gangs to cultural and social organizational factors cannot be ruled out. In summary, the literature indicates that the processes by which Hispanic and black youths become involved in gangs should be as different as the activities, structure, and orientation of the gangs themselves.

DATA

Four schools from the Humbolt Park area of Chicago serve as sites for our study. One school with a majority of Hispanic students and another with a very large majority of black students were selected by the Field Superintendent's office to receive a special gang intervention program. Both schools were presumed to have extremely serious gang problems. Two additional schools, one with a slight majority of black students and another totally black, were selected as control schools in an evaluation of the program. The researchers played no part in selection of the program schools, but were involved in comparison school selection. The schools are located generally within nine city blocks of one another. Due to delays in the initiation of the gang intervention program, funding for the evaluation was discontinued.

We had access to the police records and school disciplinary and other records of all 975 males in the sixth, seventh, and eighth grades. Still, we felt that in order to understand the process by which adolescents become involved in gangs, we needed self-report data especially concerning family conditions and delinquency. To tap these important variables, we conducted a

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[2] Hagedorn (page 124) makes limited comparisons of 175 black and 40 Hispanic "gang founders" in his Milwaukee study that indicate minor but notable differences in post-gang adult social status.

survey of all students who were present on selected days and for whom we could obtain parental permission at each of the four schools. Of the cohort population of 975 males, 439 or 45 percent completed our survey instruments.

Taking a survey of school children is always subject to the requirements of parental consent and attendance. Akers, Krohn, Lanza-Kaduce, and Radosevich (1979) describe a similar sampling process. However, they did not obtain a sample of strictly inner-city minority youths. For our data, a chi-square test of the relationship between school and being included in the survey produces a result that is statistically significant at the 0.001 level (Spergel and Curry, 1988). We obtained more representative survey responses from Hispanic students at the predominantly Hispanic school and less representative survey responses from Hispanic students at the two predominately black schools.

Comparison of Students Surveyed to Those Not Surveyed. A comparison of cohort students interviewed and those who were not reveals the following. Students who completed the survey do not significantly differ in age from those who did not. There are significant differences in attendance records. More problematic are significant differences in achievement test scores. Students included in the survey have significantly higher achievement test scores on math and reading based on t-test results. Differences in delinquency measures are uneven. There are no significant differences in the number of violent arrests per 100 students or in the overall number of school discipline reports. The difference in overall arrests is the result of the large difference in average property crime arrests.

Table 1. Comparison of School Record Population Non-Survey Respondents and Survey Respondents on Selected Variables

	Not Surveyed	Surveyed
Average Age	12.7	12.6
Mean Absence Reports	12.1	9.7**
Mean Tardy Reports	4.0	3.0*
Mean Math Score	5.48	5.91***
Mean Reading Score	5.06	5.58***
Arrest Reports per 100 Students	50.3	24.0**
Violent Arrests per 100 Students	7.8	4.6
Property Arrest per 100 Students	23.0	8.9**
Discipline Reports per 100 Students	3.5	3.0

Significance * -.05 ** -.01 *** -.001

Table 2. Average Age for Hispanic and Black Respondents by Grade in School.

	Hispanics	Blacks
Subpopulation	12.6	12.6
Sixth Grade	11.6	11.6
Seventh Grade	12.5	12.5
Eighth Grade	13.7	13.5

T-tests indicate no differences between means at 0.05 level.

Characteristics of Students by Ethnicity

Age. Table 2 compares the average ages of Hispanic and black students by grade level. For the total subpopulations and for the sixth, seventh, and

eighth graders, there are no significant differences in age between Hispanics and blacks.

Student Family Life. For comparison, we construct four possible family structures in Table 3. The first category includes all students who say they live with both their mother and their father. The second category includes all students who answer that they live with either their father or mother and a step parent. Living with one natural parent and no step parent defines the third category. Any other living arrangement, such as living with a sibling and no parent or living with grandparents, is included in the fourth category "other." For example, seven of the thirty-six respondents classified as "other" report living with only a step-mother. The differences by ethnicity are significant. A chi-square test of homogeneity shows that it is extremely unlikely that Hispanic and black students come from populations that have uniform family structures. Table 4 displays family structure from another perspective that of whether a father figure -- natural or otherwise -- is present in the home. This pattern is in keeping with the descriptions of Wilson (1987) and Campbell (1984). Table 5 shows that while family structure may differ, patterns of parental employment do not significantly differ.

Table 3. Family Type for Students in Survey by Ethnicity.

	2 Natural Parents	1 Natural & 1 Step	1 Natural Only	"Other"
Hispanic	79 (56.8%)	8 (5.8%)	38 (27.3%)	14 (10.1%)
Other (Black)	106 (35.3%)	35 (11.7%)	137 (45.7%)	22 (7.3%)

Chi-square Test of Homogeneity = 22.68
Significant at the 0.001 level of statistical significance.

Table 4. Father Figure Present in Home in Survey by Ethnicity

	Father Present	Father Not Present
Hispanic	82 (59.0%)	57 (41.0%)
Black	118 (39.3%)	182 (60.7%)

Chi-square test of homogeneity = 14.80.
Significant at 0.001 level.

Table 5. At Least One Parent (Father or Mother) Employed Full-Time by Ethnicity.

	At Least One Parent Employed Full-time	Otherwise
Hispanic	71 (51.1%)	68 (48.9%)
Black	148 (49.3%)	152 (50.7%)

Chi-square test for homogeneity is not significant at 0.05 level.

Table 6. Gang Member in Family by Ethnicity.

	Family Members Belongs to a Gang	
	Yes	No
Hispanic	40 (28.8%)	99 (71.2%)
Black	126 (42.0%)	174 (58.0%)

Chi-square test of homogeneity = 7.06.
Significant at the 0.01 level.

Some research has suggested that the home itself may be the source of exposure to gang influence (Hagedorn, 1988). That this is the case for some of the youths studied here is seen in Table 6. Over one-fourth of the Hispanic adolescents and even more of the blacks report that there already is a gang member in their family. The difference is significant at the 0.01 level.

Table 6. Official Reports of Deviancy by Ethnicity.

	Incidents per 100	
	Hispanics	Blacks
School Discipline Reports	18.0	35.3 *
Police Incident Reports	22.3	24.7
Violence Arrests	4.3	4.7
Property Arrests	7.9	10.0

* Difference significant at 0.05 level.

Officially reported delinquency. Table 6 shows levels of officially reported delinquency by ethnicity. While blacks show more reported incidents of delinquency than Hispanics by every type of report, the difference is significant for only school reported discipline incidents where the difference in rates is nearly double. Rates are closest for violence arrests.

A PROPOSED INDEX OF GANG INVOLVEMENT

We initially selected eight self-reported behaviors from our student survey instrument as potential components of gang involvement that we felt might be used as precursors or measures of gang-related behaviors. Table 8 provides a summary of our items which include attitudes, patterns of association, symbolic behaviors, and participation in gang-related conflict. Following with Hagan (1989) and Babbie (1990), we refer to these eight measures as an index until we subsequently establish their viability as a scale.

Attitude Toward Gang Membership. Our interest in this item hinges on the possibility that what students think about gang life may influence behavior. One survey item read, "In general, are there any advantages to someone being in a gang? (Circle one item only)." The choices are "yes, many," "yes, some,"

"maybe a few," and "no, none at all." We treat any of the first three ans as seeing something attractive about gang membership. As can be seen in T 9, a positive response is somewhat (but not significantly) more frequent a black respondents than Hispanics.

Association with Gang Members. A survey item read, "Among the places around here, what are the places where you and your friends hang out most the time?" As a supplement to that question, the following item asked, "W kind of people mainly hang around there? (Check all that apply.)" One of choices under that item was "Gang members." Ten percent more blacks than Hispanics indicated that they hang out where gang members hang out. A chi square test reveals that the difference is significant at the 0.05 level.

Having gang members as friends entails a greater level of social involvement than just hanging out in the same places that members do. A survey item asked, "Which words do adults use to describe your friends? (Check all that apply.)" One option was "Gang Members." Smaller proportio of each ethnic group respond that adults regard their friends as gang membe than report hanging out where gang members hangout. The proportions for e ethnic group are approximately equal.

Minor Gang Behavior. We agree with Thrasher that gang behavior may gr out of children's play group activities. Some gang behaviors fall into the category of harmless adolescent or preadolescent behavior, though in some cases school rules forbid them, for example, "flashing" gang signs and wear gang colors. One survey item read, "How many times in the last two months have you flashed gang signs at school?" Flashing gang signs, while of symbolic importance in major conflict settings, can also serve as momentary acts of adolescent challenge or rebellion to other youths and authority

figures. As Table 9 shows, black respondents are more than twice as likely to report having flashed gang signs in the last 60 days as Hispanic students. The difference is significant at the 0.01 level.

It might be assumed that wearing gang colors may suggest a greater commitment to the gang than flashing a momentary gang sign. A student deliberately rather than accidentally chooses to wear gang colors to school. He wears them all day long in school, as a rule. A survey item asked, "How many times in the last two months have you worn gang colors at school?" Despite our initial assumption that wearing gang colors might constitute a more serious commitment than flashing gang signs, larger proportions of each ethnic group reported wearing gang colors in the last sixty days. The difference between ethnic groups is not statistically significant at the 0.05 level.

More Serious Gang Activity. The final three sets of items we have selected suggests acts of more serious gang-related activity. The first set is based on the notion that deviant or criminal acts which involve gang members tend to be of distinctive, often more, criminal nature than deviant acts which are committed alone or even involve non-gang associates (Spergel 1984, 1990). In a series of items eliciting self-reports of deviant acts in the last two months, we also asked if these acts, when committed, were committed in the company of gang members. If one or more gang members were also involved in any deviant act with a respondent, we coded our variable "deviance with gang members" as affirmative. While a somewhat larger proportion of blacks than Hispanics report committing a deviant act with one or more gang members in the last sixty days, the difference is not significant at the 0.05 level.

The final two measures of serious gang involvement concern students' participation in gang-related conflict incidents. In one question, the respondent is viewed as a victim. (Unfortunately, the cumbersome wording of this item may have cost us some information.) The item read, "In the neighborhood in the last 2 months, did anyone attack or threaten to attack you or hurt you? (List where)." The following item probed, "What was the reason for this attack or threat? (Check all that apply.)" One of the choices was "gang related." Only one Hispanic youth reported being attacked in a gang incident in the last month. Only a few blacks reported such an incident.

In the other question, the respondent was asked to view himself as the aggressor or offender. This item, also cumbersome, read, "At school, in the last 2 months, did you threaten or hurt someone in any of the following places? (Check all that apply.)" The item was followed by a number of locations in and around the school. The following item probed, "What was the reason for this attack or threat? (Check all that apply.)" "Gang related" was one of the choices. Comparably small numbers of each ethnic group reported committing such an attack.

Table 8. Questionnaire Items Selected for Potential Gang Involvement Index.

In general, are there any advantages to someone being in a gang? (Circle one item only.)

Yes, Many Yes, Some Maybe a Few No, None at All

Among the places around here, what are the places where you and your friends hang out most of the time? What kind of people hang around there? (Check all that apply.)

Option: Gang Members

Which words do adults use to describe your friends?

Option: Gang Members

How many times in the last two months have you flashed gang signs at school?

How many times in the last two months have you worn gang colors to school?

(For 20 items describing deviant acts ...) Were gang members present?

In the neighborhood in the last 2 months, did anyone attack or threaten to attack you or hurt you? What was the reason for this attack or threat?

Option: Gang Related.

At school, in the last 2 months, did you threaten or hurt someone in any of the following places? (List of locations.)
What was the reason for this attack or threat?

Option: Gang Related.

Table 9. Frequencies of Potential Gang Involvement Index Items by Ethnicity.

	Hispanic	Black	
Advantage in Gang Membership	37 (26.6%)	104 (34.7%)	
Hangout with Gang Members	38 (27.3%)	112 (37.3%)	*
Gang Member Friends	22 (15.8%)	46 (15.3%)	
Flash Gang Signs	11 (7.9%)	54 (18.0%)	**
Wear Gang Colors	43 (30.9%)	82 (27.3%)	
Deviancy with Gang Members	22 (15.8%)	66 (22.0%)	
Attacked in Gang Incident	1 (0.7%)	20 (6.7%)	***
Attacker in Gang Incident	4 (2.9%)	11 (3.7%)	

Chi-square Test of Homogeneity Significance * -.05 ** -.01
*** Fisher's Exact Test Significant at 0.01 level.

GANG INVOLVEMENT INDEX AS A SCALE[3]

Inter-Item Relationships. A basic rule in upgrading an index to a scale is that items should be positively related (but not perfectly related) to each other. Since all of our gang involvement items are dichotomous in nature, we examine the tetrachoric correlation coefficients in Table 10 as a first step toward assessing the scalability of our gang involvement index items. While all items are positively related, variations in the strength of relationships

[3] Here we follow Babbie (1990) in our development of a "scale" of gang involvement from an "index" of gang involvement. According to Babbie (p. 148), "A scale differs from an index in that it takes advantage of any **intensity structure** that might exist among the individual items."

especially as represented by the levels of significance of these measures are evident when Hispanic youth are compared to blacks. Another approach to item intercorrelation involves focusing on the "power" of the matrix of correlation coefficients. When certain items in a set of measures are redundant or too heavily related to each other, this is reflected in the eigenstructure of the matrix. When this occurs, one can expect to find what is sometimes called a "scree" or point at which the eigenvalues of the matrix markedly approach zero. Such a scree indicates that the matrix is composed of items that are linear combinations of one another. As can be seen in Table 11, both the matrices of tetrachoric correlations for our gang involvement measures for Hispanics and for blacks produce sets of eight eigenvalues that do not approach zero. An additional measure of the reliability of scale times is Cronbach's alpha. As reported in Table 11, the Cronbach's alpha for each of our gang indices for Hispanics and for blacks is greater than 0.50. Now, we subject our gang involvement indices to a more stringent assessment of scalability that provides more diagnostic information.

Table 10. Tetrachoric Correlation Coefficients between Potential Index Items.

Hispanics

	ADVTG	HANG_OUT	FRNDS	SIGNS	CLRS	DEVNC	ATTCKD	ATTCKR
Hangout with Gang Members	.183*							
Gang Member Friends	.263**	.324***						
Flash Gang Signs	.150	.698***	.484***					
Wear Gang Colors	.270***	.411***	.016	.548***				
Deviancy with Gang Members	.184*	.324***	.062	.361***	.177*			
Attacked in Gang Incident	.223**	.215*	.358***	.504***	.177*	.358***		
Attacker in Gang Incident	-.022	.522***	.439***	.619***	.218**	.146	.698***	

Blacks

	ADVTG	HANG_OUT	FRNDS	SIGNS	CLRS	DEVNC	ATTCKD	ATTCKR
Hangout with Gang Members	.075							
Gang Member Friends	.114*	.278***						
Flash Gang Signs	.271***	.253***	.429***					
Wear Gang Colors	.174**	.216***	.323***	.556***				
Deviancy with Gang Members	.181**	.212***	.367***	.412***	.396***			
Attacked in Gang Incident	.328***	.102	.339***	.349***	.311***	.569***		
Attacker in Gang Incident	.332***	.301***	.315***	.369***	.325***	.401***	.646***	

Significance * -- .05 ** -- .01 *** -- .001

Table 11. Eigenvalues of Tetrachoric Correlation Matrices for Potential Gang Involvement Items.

Hispanics	Blacks
3.40298	3.32939
1.20888	1.08622
1.02384	.86825
.92631	.83730
.70857	.65571
.42873	.53764
.18643	.41401
.11427	.27148

	Hispanics	Blacks
Cronbach's Alpha	0.504	0.557

Application of Rasch Model to Gang Involvement Index. The Rasch model was developed for research on test design (Rasch, 1960; Wright and Stone, 1979; Wright and Matters, 1982). Suppose for example that a test is designed to measure an individual's knowledge of elementary mathematics. A "good" test measures differences between individuals taking the test. Some items should be "easy" -- that is correctly answered by a large number of individuals.

Some items should be "difficult" -- that is correctly answered by only a few individuals. An ill-fitting individual is one who gets an odd combination of easy and difficult items correct or incorrect. Though we are attempting to measure gang involvement rather than mathematics knowledge, patterns of responses to items should still conform to a scaling "logic" if our scale is in fact an acceptable one for measuring what we are trying to measure. The computer program MSCALE (Wright, Congdon, and Rossner, 1988) is used to fit the Rasch model to our eight items. Generating separate scaling models for our two subpopulations of students produces two distinct gang involvement scales that with modifications fit the Rasch model.

MSCALE also isolates and identifies non-fitting items and non-fitting respondents. Our scale does seem to be a "good" measure of commitment to program guidelines for seven of our items and for 438 of our respondents. No items are rejected for the eight measures and the 139 Hispanic students. One student's responses to the eight items, however, does not fit the mathematical logic of a measure of gang involvement. That student answered only two of our gang items affirmatively. In the last 60 days, he has been attacked in a gang-related incident, and he has been the attacker in a gang-related incident. The computer program MSCALE rejected this individual's behavior as being representative of involvement in gang behavior. If this Hispanic respondent's reports are accurate, he doesn't associate with gang members or imagine any advantage in being one. He is, however, involved in conflict with gang members. He is the only Hispanic respondent who admits being attacked in a gang-related incident. However, interesting a case study of this student might be, any measure of his gang involvement is negated, and one of our potential items for measuring gang involvement among Hispanic youth, being

attacked in a gang incident, is dropped.

While the rejection of one Hispanic respondent cost us an item, another item answered by a relatively large proportion of black respondents does not withstand the Rasch model analysis. The item that asked students to note the existence of advantages in gang membership does not fit the Rasch model when it is applied to the black respondents in our study. (A graduate assistant involved in an early examination of the data suggested to us that many students may not have understood the English version of this question.) In any case, if we are to follow the Rasch model for this set of data, we must exclude this item.

A final product of the Rasch model analysis is the orderings of our gang involvement measures for our two subpopulations that are shown in Table 12. Here we clearly see the different orderings of gang involvement behavior for our two subpopulations. Still, no two items are more than one ordinal position removed across ethnic groups when dropped items are taken into account.

Wearing gang colors appears to be an early act of gang sympathy with students both Hispanic and black. Perhaps such behavior is little more serious to these adolescents than wearing school colors. Hanging out where gang members hang out may also be an early development in gang involvement, earlier than wearing gang colors for blacks. It's possible that for some adolescents there may exist few opportunities for "hanging out" beyond the control of family and school that do not fit the criteria of places where gang members hang out. Hispanic youth are equally likely to be involved in youth gangs when they perform delinquent acts with gang members or when adults perceive them to be part of gang member friendship groups. Interaction with

gang members in the commission of delinquent acts appears more common among black youths in the context of gang involvement than is identification by adults as part of gang member friendship groups. Reporting flashing gang signs is indicated by this analysis to reflect a relatively serious level of gang involvement subordinate only to active involvement in gang-related violence. This finding challenges the intuitive researcher notions of the seriousness of youth gang behaviors, regardless of the ethnicity of the youth involved.

Table 12. Gang Involvement Items and Rasch Modeling Calibration by Ethnicity.

Hispanics		Blacks	
Gang Involvement Item	Calibration	Gang Involvement Item	Calibration
Wear Gang Colors	-1.52	Hangout with Gang Members	-1.27
Hangout with Gang Members	-1.29	Wear Gang Colors	- .67
Advantage in Gang Membership	-1.24	Deviancy with Gang Members	- .32
Gang Member Friends	- .43	Gang Member Friends	- .02
Deviancy with Gang Members	- .43	Flash Gang Signs	.21
Flash Gang Signs	.45	Attacked in Gang Incident	1.24
Attacker in Gang Incident	1.54	Attacker in Gang Incident	1.94
Attacked in Gang Incident	Dropped	Advantage in Gang Membership	Dropped

An initial examination of the two different seven-item gang involvement measur s for our two subpopulations reveals a mean gang involvement measure for blacks of 1.3 and 1.0 for Hispanics. While this tentatively appears significant at the 0.05 level by a t statistic, we can control for differences among three of the four school settings. If we treat school as a random

variable and control for differences in school, the mean differences in the gang involvement scales for Hispanic and black students, differences between schools, and the interaction between school and ethnicity are not significant at the 0.05 level. (Testing the mean sums of squares for ethnic effects using the interaction of ethnicity and school as the denominator in the F test produces an F of 3.45 with accompanying probability of 0.2044.)

Table 13. GLM Analysis of Variance Results for Gang Involvement Index for Three Schools of Mixed Student Population.

Source	df	Sums of Squares	Means SS	F	P
Ethnicity	1	11.682	11.682	3.45	0.20
School	2	5.205	0.588	0.33	0.72
Interaction	2	6.671	3.335	1.87	0.16
Error	385	686.264	1.783		

Table 14. Correlations between Gang Involvement Indices and Selected Variables (PE = Pearson's Correlation; PS = Point Biserial Correlation).

Gang Involvement Measure and	Hispanics	Blacks
Age	.210 (PE) **	.080 (PE)
Grade +	.324 (PS) ***	.106 (PS)
Father Figure + Present in Home	-.016 (PS)	-.093 (PS)
Head of Household + Employed	-.031 (PS)	-.048 (PS)
Gang Member + in Home	.273 (PS) ***	.352 (PS) ***
School Discipline Reports	.264 (PE) **	.214 (PE) ***
Police Reports	.257 (PE) **	.136 (PE) *

Significance * -.05 ** -.01 *** -.001

GANG INVOLVEMENT SCALE AND OTHER VARIABLES

The test of any proposed scale, or any other proposed measure, for that matter is its relationship to other variables that may or may not speak to its external validity (Babbie, 1990). Only one of the students who responded to our survey instrument had been identified by the Chicago police department as being a youth gang member. That particular black student records a score of 4 on our self-reported gang involvement scale (excluding the "advantages" item which would make the score equal to 5). We did attempt a more direct approach on our survey by asking if respondents were members of a gang. Only twenty respondents answer this item affirmatively. Only two of these twenty score zero on our gang involvement scale. Three of them score the highest response of 5. The mean for these twenty respondents is 3.05. The senior researcher (Professor Spergel) classified police reports according to whether or not "gang-like" incidents (such as group fighting) were involved. Eight of our respondents (in addition to the one identified as a gang member by the police) were involved in such incidents. Only one of these respondents scored a zero on our gang involvement scale. The average gang involvement score for these eight respondents is 2.0. Chicago Public Schools have identified two of our respondents as having been involved in gang-related incidents at school. One of them has a score of 1 and the other a score of 5.

In a test of external validity, other variables that might be expected to be related to gang involvement are school disciplinary reports and police reports. Table 14 shows that our gang involvement scale is positively related to both of these. The strength of these relations indicates the degree to which the correlation of gang involvement and deviant or criminal behavior is not a perfect one. The pattern of relationships to other variables, in

particular age and grade, further illustrates the difference between patterns of Hispanic and black adolescent involvement in youth gang activity.

IMPLICATIONS

We believe that the existence of this crude set of measures supports the possibility of predicting or measuring levels of gang involvement among adolescent males. This possibility, in turn, increases the viability of pursuing prevention strategies as a response to gang behavior. It has been noted that many youth who grow up as minorities in poor inner-city communities never become involved in youth gangs. What we propose here is the possibility of developing indices that identify potential gang members from those youths who are unlikely to become so involved.

Of equal importance is our finding that patterns of youth gang involvement are different for Hispanic and black male adolescents. This underscores the degree to which culture and social awareness must be a part of anti-gang programs.

Finally, we come to the problem of youth gangs in general. Are youth gangs a "natural" organizational response to poverty? Are youth gangs an infectious form of criminality? We, as might be expected of researchers, urge further research. Much additional analysis can still be performed on the data we are using here. Now that we have identified a set of gang involvement measures, we can look at a wide range of official and self-reported data in order to develop models that involve family and school factors in the context of different types of delinquency and drug use. Even more useful would be longitudinal data on these youths and sociometric data. To be of use, research must take advantage of the findings of previous research as well as innovations in research methodology.

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